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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,766	05/31/2002	Jutta Glock	PH/5-31142A	2715
22847	7590	03/03/2004	EXAMINER	
SYNGENTA BIOTECHNOLOGY, INC.			QAZI, SABIHA NAIM	
PATENT DEPARTMENT			ART UNIT	
3054 CORNWALLIS ROAD			PAPER NUMBER	
P.O. BOX 12257			1616	
RESEARCH TRIANGLE PARK, NC 27709-2257			DATE MAILED: 03/03/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/070,766

Applicant(s)

GLOCK, JUTTA

Examiner

Sabiha N. Qazi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Non-Final Office Action

This application is a 371 of PCT/EP00/08661, filed on 09/05/2000, and claims priority of Swiss application 164399, filed on 09/07/1999.

Claims 1-12 are pending. No claim is allowed at the present time. Acknowledgment is made of the election of species (the herbicide compound I₁ and compound IIa₁ as the safener). Herbicides safeners increase the tolerance of crop plants to herbicides. The safening effect increases in the margin of tolerance of the herbicides and allows for improved control of problem weeds with herbicides-safener combination. Several herbicide, cause atleast some crop injury when used at higher dose levels. Herbicides safeners are also called as antagonists, antidotes and protectants.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 8-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The word "grass" in claim 8 is not found in the specification. Applicant is requested to inform the location of the supporting evidence in the disclosure.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over International Patent WO 98/13361 (TOBLER et al.) and the *Physiology of Herbicide Action* (DEVINE et al.) and US Patent 6,221,810 (KRUGER et al.) reference. The references cited teach the combination of the herbicides and safeners which embraces presently claimed invention.

The TOBLER et al. reference teaches the antidotes in antidotal composition for the control of grasses and weeds, especially of maize, cereals, and soybeans. The reference teaches the combinations of safeners (the antidotes) of formula I with the herbicides of formulas II-VI in various ratios. See paragraphs 2-7 on page 46. Furthermore, the reference teaches that depending on the type of the active ingredients of formulas II-VI to be formulated, various surfactants

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having various surface active compounds may be selected. See the entire document, especially claims, examples, and the cited sections above.

The DEVINE et al. reference teaches the three main safeners groups and their different effects. The mode of action of safeners and broad variety of possible safener-herbicide interactions are summarized into Figure 17.9 on page 381. See the entire document, especially claims, examples, and Section 17.4 on page 376.

KRUGER reference teaches 3-hydroxyl-4-aryl-5-oxo-pyrazoline derivatives as herbicides. Furthermore, it teaches that in combating weeds, these herbicides, insecticides, acaricides, nematocides, plant nutrients etc can also be used as mixtures with known herbicides. See the entire document especially compounds of formula (I) in col 1; lines 1-67 in col. 33; lines 1-1-67 in col. 34; lines 1-31-in col. 35; lines 24-65 in col. 36; examples and claims.

Instant invention is drawn to a selectively herbicidal composition of:

- a) a herbicidally effective amount of 4-aryl-5-oxopyrazoline of formula I (elected species—mefenpyr-ethyl), and
- b) a safener of formula IIa to IIe (elected IIa).

Instant claims differ from the reference in claiming a broader scope of the combination of safener and the herbicides.

It would have been obvious to one skilled in the art at the time of invention to prepare additional beneficial compositions for controlling weeds in crops of useful plants because the prior art teaches the combination of safener and herbicides because, prior art teaches that herbicides when applied alone, would either may not be sufficiently active on the weeds at lower

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dose levels, or would cause some crop injury at higher dose levels required for satisfactory weed control. (see 2nd para in section 17.4 on page 376 of DEVINE et al.).

Since the compounds are known which are used as herbicides and safeners there is enough motivation provided by the prior art to combine a known herbicide with a known safener to prepare the composition for control of weeds. For the reasons cited above presently claimed invention would have been obvious to one skilled in the art at the time of invention.

It has been established single species is seldom, if ever, sufficient to support a generic claim. In re Shokal, 242 F.2d 771, 113 U.S.P.Q. 283, 285 (C.C.P.A. 1957). See also, In re Grimme, 274 F.2d 949, ___, 124 U.S.P.Q. 499, 501 (C.C.P.A. 1960) (the naming of a member of a genus or subgenus is not a proper basis for claiming the whole group).

Objective evidence of nonobviousness must be commensurate in scope with the scope of the claims. In re Tiffin, 171 USPQ 294. A showing limited to a single species can hardly be considered probative of the invention's nonobviousness in view of the breadth of the claims.

Specification discloses only few safeners in combination with herbicides (on page 29, in Table B1). Since safeners as claimed have different structures (IIa to IIe), it is not possible to predict that all safeners when used with 4-aryl-5-oxopyrazoline of formula I will have the same safening effect. As prior art teaches, the safening effect is very specific and changes with the structure of the compound and the herbicide used.

In the light of the forgoing discussion, the Examiner's ultimate legal conclusion is that the subject matter defined by the instant claims would have been obvious within the meaning of 35 U.S.C. 103(a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sabiha N. Qazi whose telephone number is (571) 272-0622. The examiner can normally be reached on every business day.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page can be reached on (571) 272-0602. The fax phone number for the organization where this application or proceeding is assigned is

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.



Sabiha N. Qazi
Primary Patent Examiner
Art Unit 1616